

Computing Policy

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Introduction:

Computing is a valued part of the curriculum at Sandwich Infant School. Computing in the National Curriculum expectations split the teaching and learning of Computing into three strands:

- Computer Science
- Digital Literacy
- Information Technology.

It is therefore important that children recognise the difference between what makes each one relevant to their future, as well as their everyday lives. High quality teaching of Computing, from Early Years Foundation Stage through to the end of Key Stage one, utilises a combination of practical lessons and theory lessons designed to promote discussion and nurture understanding, which are also relevant to other areas of the curriculum such as PSHE and Citizenship.

Aims:

The national curriculum for computing aims to ensure that all pupils:

- Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.
- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Are responsible, competent, confident and creative users of information and communication technology.

The National Curriculum for Key-Stage 1 aims to ensure that all pupils are taught to:

- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- Create and debug simple programs
- Use logical reasoning to predict the behaviour of simple programs

- Use technology purposefully to create, organise, store, manipulate and retrieve digital content
- Recognise common uses of information technology beyond school
- Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Curriculum:

Early Years:

Within the Early Years Foundation Stage, computing is not taught explicitly. However, there are opportunities for computing to be taught through the continuous provision approach to learning in the environment. Children in our reception classes explore how things work, try new activities and show independence, resilience and perseverance in the face of challenge. They learn and talk about the different factors that support their overall health and wellbeing: -sensible amounts of 'screen time', as well as safely using and exploring a variety of materials, tools and techniques, experimenting with function. This is achieved through the use of hardware such as the interactive whiteboard, ipads and laptops and appropriate software on these.

Key Stage 1:

Throughout key stage one, children learn how to use the internet safely and respectfully, how to create an algorithm, how to create and retrieve digital content and how to write a simple program. These are all taught through the three strands mentioned above and the use of hardware such as beebots, ipads and laptops, using appropriate software on these.

Organisation, Record Keeping and Assessment:

As our school has two classes per year group, planning is undertaken by both teachers in each year group and adapted to suit the individual needs of the children in their class. This is to ensure full coverage of our Computing curriculum and that the work set is appropriate for each individual child that we teach. Children's work is recorded digitally where possible and is also added to a class floor book as evidence. Each class has its own floor book for the subject and it is the class teacher's responsibility to keep this up to date and log the participation of each child in the front of the book for assessment purposes. Assessment will be undertaken using the following methods:

- observation of pupils
- talking with pupils/ pupil voice
- work recorded in the class floor book
- Children's responses to key assessment questions.

Role of Co-ordinator

The Computing co-ordinator leads the maintenance and development of the subject. They are responsible for assuring quality and standards in the subject by:

- Taking the lead in the development, evaluation and amendment of schemes of work as and when necessary.
- Identifying training needs of staff through monitoring.
- Monitoring and evaluating pupils' work and class floor books, talking with children about their learning and recording pupil voice, colleagues' planning and classroom teaching.

Ensuring continuity and progression in learning

At Sandwich Infant School we recognise that in order to ensure continuity and progression for all pupils, a carefully organised curriculum is needed in order to ensure that pupil's knowledge and understanding is developed. This is to ensure that:

- The curriculum becomes progressively more complex as children progress through the school, providing challenge and new experiences that build upon current knowledge;
- Children are able to respond to their learning both verbally and in form using taught vocabulary in the correct context;
- The mastery and application of software, hardware and skills occurs in more precise and complex contexts;
- There is increasing breadth and scale of study through the curriculum moving progressively from personal experiences to local, regional, national and global perspectives